

# ITEMS

VOLUME 3 • NUMBER 2 • JUNE 1949  
230 PARK AVENUE • NEW YORK 17, N. Y.

## "EXPERIMENTS ON MASS COMMUNICATION"

by Carl I. Hovland, Arthur A. Lumsdaine, and Fred D. Sheffield

ANNOUNCEMENT has just been made that *Experiments on Mass Communication* will be published by the Princeton University Press during the month of June. This volume is the third in the series entitled *Studies in Social Psychology in World War II*, prepared by former members of the Research Branch, Information and Education Division of the War Department.<sup>1</sup>

*Experiments on Mass Communication* is an analysis of the impact upon the soldier of Army educational and indoctrination films, based on a series of studies conducted by the Experimental Section of the Research Branch. This Section had as its primary mission the evaluation, by means of controlled experiments, of various Army programs designed to make the soldier aware of the ideological issues behind the war. At the same time the Experimental Section was called upon by other War Department agencies to evaluate the methods and media that were being used, on an unprecedented scale, in the mass communication of purely technical instruction. Studies of both types of communication—for indoctrination and for instruction—are included in this volume.

The studies reported are those whose methods or results have generality beyond the immediate practical objectives initially involved in the experiments. The

authors have attempted to give perspective to the studies by outlining the general field of research on the effects of mass communication media and indicating requirements for an adequate systematization of the field. An extensive appendix is devoted to presentation of some of the methodological problems encountered in carrying out the work. The volume is thus of interest both to those concerned with the production and utilization of communication media and to those concerned with research on the effects of communications on the audience to which they are presented.

Extensive studies conducted to evaluate the Army's "Why We Fight" orientation films are described, using "The Battle of Britain" to illustrate in considerable detail the procedures employed and kinds of results obtained. In these studies an analysis was made of the audience's evaluation of the films as gauged by questionnaires and group interviews. However, this basis for evaluation was subsidiary to the main purpose of the studies, which was to determine by controlled experimental comparisons the actual effects of the films on men's knowledge and opinions concerning the material covered. Results for all the orientation films studied were consistent in revealing that the films produced sizable increases in men's factual knowledge, but more limited effects on opinions or interpretations of the facts, and little or no effect on motivations. Hypotheses to account for the relative ineffectiveness of the films in the latter areas are discussed in detail, with reference to relevant data where available. A study of one of the films, in which measurements were made both shortly after the showing of the film and after a considerable lapse of time, suggests that whereas normal forgetting

<sup>1</sup> As stated in the description of the first two volumes in the March issue of *Items*, these reports were sponsored by a special committee of the Social Science Research Council and financed by grants to the Council from the Committee of Trustees on Experimental Programs associated with the Joint Army and Navy Committee on Welfare and Recreation and from the Carnegie Corporation of New York. The members of the committee are: Frederick Osborn (chairman), Leonard S. Cottrell, Jr., Leland C. DeVinney, Carl I. Hovland, John M. Russell, and Samuel A. Stouffer.

occurred with respect to the large immediate gains in factual knowledge, forgetting did not appear in the case of some of the opinion changes produced, and in some instances there were actual increases in effect with the lapse of time.

A considerable number of insistent requests were received from various War Department agencies for studies of the relative effectiveness of one medium of communication versus some alternative medium. The limitations of such research are discussed in terms of the inherent limitations on the generality of the findings, and it is pointed out that even for answering the empirical question whether medium A or medium B is better for some particular purpose a sizable sample of products of each medium is required, for the same reason that a sample of audience members is needed. The role of such research is shown to be primarily that of furnishing "hunches" and hypotheses for further study, and of providing means of analyzing the effects on different portions of the audience.

From a series of studies evaluating indoctrination and training films it was possible to make an extensive analysis of the role of various demographic and other factors. Surprisingly, the only variable consistently found to be closely related to the effects of the communications studied was intellectual ability, as indicated by men's scores on the Army General Classification Test or by the number of years of schooling completed. In the transmission of information the relationship between amount learned and intellectual ability was strongly positive. Parallel analysis for opinion change, on the other hand, showed changes on some items to be positively related and on others negatively related to intellectual ability. It is shown that an additional factor termed *acceptance* is of importance in the analysis of opinion changes, and that the changes in belief found to be positively correlated with intelligence were those which were initially more prevalent among the more intelligent. Other changes, however, tend to be *negatively* related to intellectual ability.

A significant portion of the book deals with experiments which were set up specifically to isolate the effects of important theoretical variables. In these studies the method of controlled variation permitted conclusions less limited in generality than those possible from the purely evaluative studies. One of these experiments was concerned with a technique for inducing the audience to participate more actively in the learning of material presented in the film. The role of this active participation procedure was simultaneously studied in relation to the effects of motivation, difficulty of the material to be learned, and the learning ability of the individual members of the audience. By means of this controlled

variation of several different theoretical factors acting in combination, the findings on the role of the active participation procedure may be generalized with reference to a variety of relevant circumstances. It was found that under all conditions this procedure increased the amount learned but that the improvement was greater when motivation was low, when the material was difficult, and when the individual learner was relatively low in intellectual ability. With all variables acting in concert a gradient of effects of participation was obtained, ranging from practically no effect for intelligent, motivated men learning easy material to a maximal effect with less intelligent, unmotivated men learning difficult material.

In another study employing controlled variation of content, the effects of presenting both sides of the argument on a controversial issue were compared with the effects when a one-sided version was given. In each case the communication attempted to influence a given opinion in the same direction; the only difference between the two was the inclusion or noninclusion of arguments on the other side. The effects of the content variable were determined as a function of initial opinion and intellectual ability, two additional variables of theoretical interest. It was found that inclusion of arguments on the other side of the controversial issue was superior in producing the intended opinion change for those of greater intellectual ability, regardless of initial position. It was also found that for the group as a whole the argument with "both sides" was superior for individuals initially opposing the point of view being fostered. Further, the argument including "both sides" was least effective with the less intelligent men who were initially in favor of the opinion being fostered, the results even suggesting a slight adverse effect. Thus the most effective use of the arguments for and against a controversial issue was found to depend on the composition of the members of the audience with respect to initial opinion and intellectual ability.

As mentioned earlier, the primary purpose of the experimental studies was to provide practical answers to War Department problems. Most of these questions took the form of a request for a practical evaluation of a specific program or a comparison of existing programs. But it was found that when the experiment could be put in the form of controlled variation studies of the kind described above, the results were likely to be more valuable in providing practical suggestions for effective methods of preparing communications, largely because of the greater generality of the findings. Thus experiments designed to extend scientific knowledge appeared to have been more practical than those designed solely for purposes of "practical" evaluation.

# ISOLATION, MEASUREMENT, AND CONTROL OF INTERVIEWER EFFECT

by Herbert Hyman

THE final phases of work on a two-year study of the isolation, measurement, and control of interviewer effect are now under way. The project is part of the program sponsored by the joint Committee of the NRC and SSRC on the Measurement of Opinion, Attitudes and Consumer Wants and is supported by a grant from the Rockefeller Foundation. The actual research is being conducted by the National Opinion Research Center with the aid of an advisory committee composed of Frederick Stephan (chairman), Archibald M. Crossley, W. Edwards Deming, George Gallup, Paul F. Lazarsfeld, Rensis Likert, and Elmo Roper. Early in the study it became clear that findings of any comprehensiveness and generality would call for concerted research in many fields and by many organizations, and the project has been most fortunate in having the generous collaboration of many private and university survey agencies in this country and abroad, as well as of individual scholars and graduate students in several universities.

There has also been mutual cooperation between the NORC project and two related projects sponsored by the joint committee. The existence of these two projects, one concerned with sampling methodology and the other with problems in the use of panels, was helpful in defining the scope of the study of interviewer effect, and results of their researches have been made available to the NORC project in advance of publication. The final results of the NORC project, therefore, will truly be a group product.

During the first year of the study, emphasis was placed on examination of existing surveys for materials that might bear on the problem of interviewer effects. It was hoped that suggestions would be forthcoming as to the independent variables related to interviewer effects, the types and magnitudes of such effects, and the process by which they occur. While these preliminary analyses were not based on ideal controlled experiments, they have yielded useful information of this type. For example, analyses of effects of disparities in group membership of interviewer and respondent upon survey results are available. Such characteristics as sex, color, religion, and familiarity or strangeness of the interviewer have been shown to operate differentially depending on their interaction with other factors. For example, changing from a Negro interviewer to a white produces a greater effect on responses in the South than in the North; the strangeness of the interviewer may have one effect in an area characterized by suspicion of

strangers and another effect in a different context. Other analyses have been made of the degree to which different types of questions, e.g., card or dichotomous questions, have differential susceptibility to interviewer effects.

While this early work was suggestive of the direction which more controlled experimentation should take, it became evident that the published literature and analysis of discrete studies were inadequate as guides. An adequate theoretical description of the nature of the total interview situation was needed. Only insofar as we knew what types of behavior were operative in the interview, how the interviewer and respondent perceived each other, what roles and motives and beliefs were involved, would we have a sufficient basis for designing intelligent experiments. This conviction led first to a program of intensive interviewing of interviewers concerning their experiences.

Only a few such interviews were necessary to focus attention on factors present in the interview that had not been subjected to prior experimental study. Interviewers seemed to approach the interview situation with a prepared set of expectations as to how particular respondents would answer, or to develop these expectations on the basis of the early responses. Some interviewers' expectations were in essence over-simplified stereotypes of the prevailing attitudes of certain population groups. These expectations act as guides at various points of choice in the interview. Despite the apparent standardization of the survey procedure, the interviewer at times can choose between alternative courses of action, such as probing or going on to the next question, or classifying an equivocal answer as an "approval" or as a "don't know." He seems to be directed in part at these points by his conception of what the respondent truly believes. As one experienced interviewer put it: "Once they start talking I can predict what they'll say."

The intensive interviews with interviewers also demonstrated that they adopt different attitudes about the roles which they should assume during the interview. Some interviewers feel it is their role to be psychoanalysts, to probe into the hidden depths of respondents' attitudes. Other interviewers regard their role as a more mechanical and superficial one. The mechanical role is illustrated in the following quotation: "I don't care what the person thinks . . . I myself am not interested in what they say, their opinions, how they feel. I'm not involved. It just feeds through me to the paper." The clinical role is well illustrated in the words of James Stern who served as a survey interviewer in the U. S.



Strategic Bombing Survey in Europe: "I do not consider my temperament suited to the Gallup Poll type of interrogation. In fact, I doubt whether I could ever make an efficient interviewer. I became too interested in the character and personal history of the individual. I wasted time wondering how much he said was true, how much false. . . . I'd be tempted by their answers to ask off-the-record questions."<sup>1</sup> The elaborateness of answers may well represent not only the true nature of respondents' beliefs but also the unequal probing tendencies of different interviewers, stemming from the roles they habitually assume.

Paralleling this investigation of interviewers, some intensive interviews with a small sample of respondents have been conducted, with the aim of constructing from their reports the other side of the interview situation. We have inquired into their feelings while being interviewed, how they perceive the situation, what role they think they have, what elements in the interview situation they focus upon, and the like. These interviews have been immediately revealing of a number of factors which provide a better understanding of the problem of interviewer bias. For example, in much past research on interviewer effect it has been assumed that the respondent is alert to the ideology of the interviewer and may distort his true feelings on the basis of this knowledge. These interviews, however, in some instances show a total apathy to the interviewer on the part of respondents. Shortly after the original interview, some of the respondents were unable to describe the interviewer even in the vaguest of terms, and their spontaneous references to the interview often do not allude to him at all. One respondent, for example, when asked what the interviewer had been like and then pressed for a description, was able only to say "a tall woman." From such inquiries, a more elaborate psychological description of the interview situation is being built to serve as a basis for more refined experimentation in the future. The research has now reached a phase of quantitative experiments on interviewer effects. These experiments are of many types and some represent repetitive studies of the same problem.

One type of research involves the measurement of interviewer differences under natural survey conditions. In these experiments, by deliberate design, a series of interviewers are given equivalent assignments, and any differences in the *final* results can be safely allocated to the effect of the interviewers. Homogeneous groups of interviewers are used in some cases and the differences found permit some practical generalization as to the magnitude of interviewer effects on the final data

under usual survey conditions. In other experiments interviewers contrasting as much as possible with respect to certain independent variables have been used, so as to demonstrate the theoretical relation between interviewer effects and these variables. Such characteristics as length of experience, formal education, sex, and personality traits are all being studied in one multivariate design experiment under way in Denver.

For such results to have generality, the findings must be replicated for different types of survey data, different organizations, and different operating conditions, since it has been shown that a given independent variable has a different effect depending on its interaction with other factors. The results of perhaps eight such experiments will be available.

The mere demonstration of interviewer differences, no matter how precise the experiment, is not a sufficient basis for drawing the type of conclusions that would be desirable. Implicit in any study of the effect of different types of interviewers on survey results is the requirement of some *evaluation* of the results. If a difference between experienced and inexperienced interviewers is demonstrated, one would like to determine which type of interviewer achieved the *better* result. Evaluation of interviewer effects, therefore, calls for quantitative experiment incorporating some method for appraising the quality of results. Consequently, a survey in which interviewers of different characteristics are given equivalent assignments is being conducted in Denver, where valid data from external sources are available on many characteristics such as age, occupation, possession of a library card, automobile ownership, home ownership, telephone subscription, charitable contributions, and registration and voting. We expect to be able to state whether interviewers get different results, and which types get better results.

An additional advantage of this experiment is evident. Even when interviewers get identical results, it would be a mistake to conclude that there are no interviewer effects. It may well be that the more important sources of error in survey data are not the *differential* effects of individual interviewers, but the common errors introduced by *all* of them. The data on validity available in the Denver study provide a measure of the constant errors of all interviewers, in addition to differential interviewer effects.

In general, the attention given to studies of differential interviewer effects proceeds from a conservatism about survey methodology. Such research accepts the traditional framework of public opinion interviewing, and merely looks toward measurement of differential errors and consequent improvement within this accepted framework. Research on the over-all level of error, over

<sup>1</sup> *The Hidden Damage* (New York: Harcourt, Brace and Company, 1947), p. 127.

and above this, may yield a guide to radical improvement of traditional interviewing procedures.

On this more fundamental approach to the problem of interviewer effects data will also be available from other sources. A thorough analysis is being made of the characteristics of approximately 1,000 interviewers who have been trained for the NORC staff since the establishment of the agency. Parallel data on the characteristics of field staffs of several other survey agencies will be analyzed. Among the many practical findings of these studies will be a picture of the long-term operating character of the public opinion interviewer. For example, the distributions of interviewers according to such characteristics as age, color, marital status, religion, sex, social class, and political affiliation will be available. They will show to what extent respondents are exposed to a given complex of interviewer characteristics, against which the more experimental research on the effects of these specific characteristics can be juxtaposed.

Examination of the quantitative experiments also shows them to be inadequate on several other scores. While they yield precise estimates of differential interviewer effects associated with given independent variables, they provide no evidence as to the *locus* of these effects. They merely demonstrate the net or aggregate effect on the final survey results. The need is for research which will analyze the interview process, and show at what point specific kinds of behavior occur which mediate the final interviewer effects. The research designed to meet this objective has been of several types. In some studies the total performance of the interviewer and respondent can be observed by the use of hidden mechanical recordings. These records can be analyzed to throw light on the types and magnitudes of interviewer errors, and to show how and when interviewers mediate their effects on the respondents.

Another approach to study of the process underlying interviewer effects is through designing experiments in which given aspects of interviewing are isolated by limiting the interviewer's task to a small portion of the normal performance. Thus, interviewers can be required merely to record a prepared set of answers which are read to them. This permits a separate measure of errors in recording and classifying answers apart from other phases of the interview process. Interviewers can be required to ask a set of questions, listen to the answers, and record the answers verbatim, isolating from the process the phase of field coding common to most public opinion polls.

Certain types of surveys lend themselves to the study of discrete phases of the interview process. For example, in secret ballot techniques, the interviewer is by definition prevented from asking the questions or recording

the answers. Consequently, the element mediating any interviewer effect is essentially the reaction of the respondent to the appearance of the interviewer.<sup>2</sup>

Surveys involving telephone interviews, common to measurement of radio listening, exclude by definition all elements of the survey process except the *auditory* cues incident to asking the questions and the interviewers' recording of the answers. These two sources of information, artificial laboratory experiments and normal surveys limited to discrete interviewing tasks, should provide an understanding of the dynamics of interviewer effects. Each aspect of the process can be studied in relation to certain independent variables. For example, it is possible to analyze the effects of interviewers' expectations on final survey results or merely on the recording of answers in a laboratory setting.

It can be seen that the NORC study of the isolation, measurement, and control of interviewer effects has not followed any single trend in method or approach. Case studies and phenomenological interviewing have been used; there has been a parallel use of quantitative methods. Certain studies have been limited to differential interviewer effects; parallel study of common effects has been focused on the general problem of validity. We have been concerned with end effects, and also with the dynamics of the interviewing process. The project was not committed in advance to the investigation of any given set of independent variables, but tried to construct the appropriate variables to study by inductive methods. The complexities of the interviewing process demanded a manifold approach and the concerted research of many individuals. It is hoped that the project will lead to considerably increased understanding of the problems of interviewing. There should be practical gains to pollsters and, in addition, much of the research should increase our fundamental understanding of such systematic problems in social psychology as perception and judgment and sharpen our general methodology for future research.

It is expected that a final summary publication of findings will appear early in 1950. Inquiries concerning the research should be addressed to the National Opinion Research Center, 280 Madison Avenue, New York 17, N. Y. Relevant data from outside agencies will be gratefully received.

Staff members most actively concerned with the actual research have included Clyde Hart, Director, Don Cahalan, Gordon Connelly, Helen Crossley, Lester Guest, Herbert Hyman, Paul Sheatsley, and Herbert Stember.

<sup>2</sup> A demonstration of such an interviewer effect is briefly reported in Chapter VII of the staff report of the Social Science Research Council's Committee on Analysis of Pre-election Polls and Forecasts, to be published during the summer as Council Bulletin 60.

# NOTES ON RESEARCH TRAINING FELLOWSHIP POLICIES

by Elbridge Sibley

In the autumn of 1947 the Council's Committee on Problems and Policy approved a new statement of policy governing the award of research training fellowships. The statement reflected the growing determination of the Council to endeavor through the fellowship program not merely to enable a limited number of superior individuals to secure advanced training in social science, but to exert influence in favor of more adequate training for scientific research. The policy statement, prepared by the Committee on Social Science Personnel, sets forth two main objectives: (1) to stimulate the development of more adequate research training programs in graduate schools; (2) to enable selected individuals to supplement the research training afforded by the doctoral programs of universities. Full realization of these objectives would have required a great deal more staff and committee work than has been possible since the statement was adopted. The Committee on Social Science Personnel has, however, attempted in many cases to persuade applicants and their academic advisers of the desirability of some other training than that which was proposed in the original application. The crucial criterion of eligibility for a research training fellowship is, in the words of the committee's statement, "an interest in the discovery and verification of verifiable and predictable uniformities in social structure and behavior." Given a candidate who evidently shares this interest and whose record indicates good academic training and superior intelligence, his proposed program is reviewed in the light of his previous preparation and long-run goals. Not infrequently the candidate is informed that, although his present application will not be granted, a fellowship would be awarded him for a different program of training.

Because the fellowship program of the Council is designedly kept flexible, it is difficult to make clear in formal public announcements exactly what constitutes a satisfactory program for an individual applicant. Perhaps a few anonymous and somewhat synthetic case histories will be informative. All the applicants in question had excellent academic records and were well recommended.

Case 1, Ph.D. candidate in history, applied for fellowship for biographical research in the library of his own university. His application was rejected on the ground that this would afford no training beyond what is required of all Ph.D. candidates.

Case 2, Ph.D. candidate in political science, proposed to spend a year traveling from state to state studying

the "impact of public opinion on legislative appropriations committees." He was offered a fellowship on condition that he would spend the year studying and gaining practical experience in methods of opinion measurement under suitable guidance.

Case 3, Ph.D. candidate in sociology, proposed to conduct research on reactions of members of two ethnic groups to certain frustrations. His proposed program was rejected but he was offered a fellowship for needed training in psychology.

Case 4, without previous training in the subject, applied for fellowship for study of agricultural economics in an English university. He was advised that he must have adequate basic training in his chosen discipline in this country before going abroad to supplement it.

Case 5, Ph.D. candidate in history, proposed to study the history of social legislation. He has been advised that before his application can be considered he must make plans for securing basic training in law and in certain other social science fields.

Case 6, Ph.D. candidate in psychology, proposed to study personality types in a primitive society. He was advised to revise his application to provide for training in social anthropology.

Case 7, Ph.D. candidate in economics, modestly proposed to study certain policies and practices of public utility companies on the basis of published documents. It was suggested that he might gain more valuable experience by making a number of visits to different cities, and he was offered a travel allowance which he had not requested.

It is to be noticed that these cases follow no single pattern. In a majority, however, the committee required that certain gaps in methodological training be filled before undertaking independent research.

Not all persons familiar with the Council's fellowship programs in past years may have become aware that the regulation requiring that predoctoral fellows should not engage in preparing dissertations during their fellowship terms is no longer in effect. This change by no means signifies that the Council is now prepared to grant fellowships to many high-ranking graduate students who are ready to write dissertations. Thesis projects, like any other projects, are acceptable only if they appear best calculated to enhance the research qualifications of a candidate of superior ability. The Committee on Social Science Personnel evaluates not merely the intrinsic merit of the program proposed by the candidate, but his total training in relation to his goals.



Although the committee's policy excludes granting fellowships to take effect before completion of all requirements for the Ph.D. degree with the exception of the thesis, it does not preclude granting fellowships for additional formal study (usually interdisciplinary) after completion of required courses and before beginning

work on a dissertation. It is neither necessary nor always advisable for a prospective candidate to wait until he has met all preliminary requirements before submitting an application.

Awards recently made by the Committee on Social Science Personnel are listed on page 22, *infra*.

## COMMITTEE BRIEFS

### ECONOMIC HISTORY

Arthur H. Cole (chairman), Earl J. Hamilton, Herbert Heaton, John G. B. Hutchins, Harold A. Innis, Leland H. Jenks, Edward C. Kirkland, Frederic C. Lane, Robert Warren.

The committee has found an opportunity for the extension of research on the relation of government to American economic development in the explorations being conducted by Carter Goodrich of Columbia University with the collaboration of graduate students at that institution. To assist in the stimulation of these studies the committee has provided funds for financial aid to the young men who are making their investigations under his direction. Four have been designated Resident Fellows in American Economic History at Columbia University, for the studies indicated:

Carter H. Golembe, an evaluation of the role of the state banks in the economic development of selected midwestern states prior to the Civil War.

Benjamin J. Klebaner, the poor law problem in America, 1790-1860.

Nathan Miller, government and the economy: New York in the period of De Witt Clinton.

Harvey H. Segal, internal improvements activity and business cycles, 1834-61.

Also in the group is H. Jerome Cranmer, who has received a grant-in-aid for study of the role of government in the economic development of New Jersey, 1796-1860.

The committee has also approved the efforts to explore the area of entrepreneurial history which have been under way during 1948-49 at Harvard University. To aid the work of this new Research Center in Entrepreneurial History it has voted financial aid for 1949-50 to four Resident Fellows in Economic History, for the following studies:

Hugh G. J. Aitken, the contribution of entrepreneurship to economic growth, particularly with reference to Canada.

David S. Landes, the French businessman and the industrial revolution, 1830-70.

Harold C. Passer, a history of the electrical manufacturing industry in the United States.

R. Richard Wohl, a biography of Daniel W. Norton, a versatile Connecticut entrepreneur, 1799-1874.

Appointments under the committee's program of national fellowships in economic history which it offered for the year 1949-50 are listed on page 23, *infra*.

Grants-in-aid of research have been made to M. A. Adelman and Robert K. Lamb of the Massachusetts Institute of Technology. The former seeks to extend the historical aspects of his study of the Great Atlantic and Pacific Tea Company, while the latter is working upon a volume devoted to the role of the family in American economic development over the first decades of our national existence. A grant has also been made to John T. O'Neil of the University of North Carolina, to aid in preparing for publication his examination of the Burlington Railroad's re-funding operations of 1944-45, a study of the process of executive decision

A. H. C.

### HOUSING RESEARCH

Richard U. Ratcliff (chairman), Charles S. Ascher, Howard G. Brunsman, Nicholas J. Demerath, Ernest M. Fisher, Robert K. Merton, Robert B. Mitchell, Arthur M. Weimer, Coleman Woodbury; *staff*, Gerald Breese.

Nearly 100 persons participated in a series of four informal conferences on housing research held at Denver, Los Angeles, Berkeley, and Seattle during March. These meetings were held under the direction of Richard U. Ratcliff and Coleman Woodbury and were sponsored jointly by local groups, including members of Pacific Coast committees of the Council. A similar conference of personnel active in housing research in the South was held in connection with the committee's meeting at Chapel Hill, May 5-8. In addition to extended discussions of housing research problems, participants were addressed on "Plans for the 1950 Housing Census," by Howard G. Brunsman; "Housing Legislation and Housing Issues," by Coleman Woodbury; and "The Southern Mill Village Liquidates," by Harriet Herring. At the Chapel Hill meeting the committee evaluated its first two years of activity and charted a possible future program, taking into account the research on social aspects of housing which may be undertaken as a result of pending new federal housing legislation.

### INTERNATIONAL EXCHANGE OF PERSONS

(Joint with the American Council on Education, American Council of Learned Societies, and National Research Council)

Aaron J. Brumbaugh (chairman), M. H. Trytten (secretary), Carl W. Blegen, Detlev W. Bronk, George S. Counts, Fred Eggan, Mortimer Graves, Pendleton Herring; *staff*, Gordon T. Bowles, executive secretary; Francis A. Young.

The U. S. Government Program of Educational Exchanges under the Fulbright Act is now in operation in the following countries: Burma, Philippine Islands, New Zealand, the United Kingdom, France, Belgium and Luxembourg, Italy, and Greece. Competition for opportunities for the academic year 1949-50 has been closed, except for openings still unfilled in Burma and the Philippine Islands. An agreement has just been signed with the Netherlands and it is hoped that it will soon be possible to formulate a program for that country. It is expected that several other countries will participate in the program as soon as the necessary agreements have been signed. These countries include Australia, Austria, Egypt, India, Iran, Norway, Pakistan, and Turkey. It seems probable, therefore, that operations under the program in the course of the coming year will more nearly approach the scale envisaged when the program was initiated.

With reference to applications for awards, many of the policy and administrative difficulties experienced during the formative stages of the program have been in large part resolved. It may be expected that the machinery for publicizing opportunities and for considering and acting upon applications will operate much more smoothly and on a more satisfactory time schedule during the coming year than has been the case heretofore. Announcements of opportunities for 1950-51 in most of the countries now participating in the program can be anticipated during the fall months and prospective applicants should be prepared to submit their applications before December 1949.

The Board of Foreign Scholarships and the Department of State have delegated responsibility for preliminary screening of applicants for grants to three agencies: the Conference Board of Associated Research Councils, 2101 Constitution Avenue, Washington 25, D. C., in the case of applicants for university teaching or advanced (postdoctoral) research abroad or those wishing to teach in American-sponsored secondary schools abroad; the Institute of International Education, 2 West 45 Street, New York 19, N. Y., in the case of applicants for graduate (predoctoral) research; the Division of International Educational Relations, the U. S. Office of Education, Federal Security Agency, Washington 25, D. C., in the case of applicants for teaching positions in national primary and secondary schools abroad.

At the invitation of the Conference Board and the Institute of International Education, most colleges and universities in this country have designated one or more representatives on each of their campuses to act for their respective institutions in receiving information regarding continuing developments in the Fulbright program and to answer local inquiries concerning current opportunities in the participating countries. Persons having any difficulty in obtaining the names of the representatives at their respective colleges or universities may write to the Conference Board or the Institute of International Education.

Applicants should bear in mind that while the awards are normally ample to meet the financial requirements of the applicant insofar as his activities abroad are concerned,

all payments under the Fulbright Act are made in foreign currencies. Each American participating in the program must make his own individual arrangements for such dollar balances as he will require to meet essential obligations in the United States during his absence abroad.

Opportunities for teaching and research in the social sciences are well represented in the program and a substantial number of awards have already been made in these fields.

F. A. Y.

#### LABOR MARKET RESEARCH

J. Douglas Brown (chairman), E. Wight Bakke, Philip M. Hauser, Clark Kerr, Charles A. Myers, Gladys L. Palmer, Carroll L. Shartle, Dale Yoder; staff, John G. Turnbull.

At the fifth annual Conference on Research and Training in Industrial Relations, held at Minneapolis, May 18-20, under the joint auspices of the committee and the University of Minnesota, particular attention was given to the sharpening of approaches, concepts, and hypotheses in industrial relations research and to the role of attitude and morale measurement in such research. The objectives, techniques, and findings of the Nashua labor market study of the Massachusetts Institute of Technology and the Decatur study of the University of Illinois were reviewed in terms of their significance and usefulness for long-term research planning and development. In considerable part the Minneapolis conference represented an extension of a conference on labor-management relations research held under the committee's auspices at Princeton, February 24-25, 1949. At the latter conference, preliminary exploration of the current stage of labor-management relations research was undertaken, and an opportunity was provided for exchange of ideas in an attempt to determine the extent to which agreement could be reached concerning useful research concepts and techniques. A report of the Princeton conference will be available within about a month.

Continuing the series of publications which the committee has sponsored, *Research on Wages: Report of a Conference Held on February 21-22, 1948, at the Littauer Center, Harvard University*, was mimeographed and issued recently. The fourth edition of the *Memorandum on University Research Programs in the Field of Labor* was distributed beginning February 1. It is contemplated that a research planning memorandum on labor-management relations, by John G. Turnbull, will be published by early autumn. The committee is currently planning the preparation, for publication next winter, of a volume of papers summarizing and evaluating recent research on labor mobility and the structure of the labor market.

#### PACIFIC COAST COMMITTEE

##### ON COMMUNITY STUDIES

Leonard Bloom (chairman), Allen L. Edwards, William Robinson, Calvin F. Schmid, Eshref Shevky, Robert C. Tryon, Paul Wallin.

The committee met at San Jose, April 16-17. Calvin F. Schmid reported on the completion of plans for the divi-



sion of the state of Washington into 1,000 statistical areas and census tracts, in preparation for the 1950 census. This is the first state to be so treated; the opportunities for areal analysis are illustrated in the fact that in 1940 only 79 tracts were designated. Leonard Bloom reported on the processing of enumeration district data for the Los Angeles metropolitan area; this analysis is being planned in order to provide a measure of the homogeneity of census tracts, and also to provide a basis for sampling localities in terms of specific variables. Committee sessions were also devoted to considering the following reports, which are now being prepared for publication: William Robinson, a paper on ecological correlations; Calvin F. Schmid, a paper on the typology of cities; and Leonard Bloom and Eshref Shevly, a report on the differentiation of ethnic groups. H. E. J.

#### PACIFIC COAST COMMITTEE

##### ON SOCIAL STATISTICS

Davis McEntire (chairman), Maurice I. Gershenson, George M. Kuznets, William Robinson, Calvin F. Schmid.

The committee sponsored a Conference on Statistics of Social Welfare under the chairmanship of Davis McEntire, at San Jose on April 15-16. Held in conjunction with the annual meeting of the Pacific Sociological Society, the conference was called to bring together people engaged in statistical and research work in social welfare agencies, both public and private, on the Pacific Coast; to review the present status of welfare statistics and research; and to direct attention to existing needs and problems in that field. Approximately 20 persons participated, representing state agencies of California and Oregon, the federal Social Security Administration, county welfare departments, Community Chests and Councils of Social Agencies, and several branches of the University of California.

The conference emphasized a need, in relation to public assistance programs, for supplementing routine statistical reporting with special studies, repeated periodically, of the social characteristics, living arrangements, and reasons for distress of relief applicants. It was pointed out that current statistics relate mainly to volume of case loads and costs but little is known about the characteristics of relief recipients or the circumstances which reduce people to dependency, or of changes in these factors. Too often, when special studies are undertaken, they are given a low work priority with the result that data are delayed in preparation until they are no longer timely. Conference participants stressed the need for development of continuous sampling techniques which could be utilized for periodic and timely collection of supplementary data of the type desired. The suggestion was made by several conference participants that the pamphlet published by the Council's former Committee on Social Security, *Topics for Research Concerning Public Assistance Programs* by John Charnow (1941), merits revision with a focus on current issues in public assistance.

Attention was also called to the need for up-to-date consumption studies as a basis for the determination of budgets

of dependent families. At present, there are no satisfactory consumption data as of a period later than 1935-36, although there is reason to believe that family spending patterns have changed considerably during the war and postwar years. Participants in the conference urged the need for consumption data sufficiently localized to provide a basis for California budgets. If another national consumption study should be undertaken, it is hoped that the samples will be large enough to justify separate tabulation of results for the San Francisco and Los Angeles areas. In addition to the topics mentioned, consideration was given to the status and role of research in voluntary social welfare agencies and in Community Chests and Councils of Social Agencies. A report of the conference proceedings is in preparation. H. E. J.

#### PUBLIC LIBRARY INQUIRY

Robert D. Leigh (chairman), Ralph A. Beals, J. Frederic Dewhurst, Donald G. Marquis, Mary U. Rothrock, Richard H. Shryock, Malcolm M. Willey; staff, Robert D. Leigh, director.

The public library inquiry is now nearing completion and its findings will be published during the summer and fall. Under an agreement with Columbia University Press the results of the inquiry will not be made available to the public in published form until the opening of the University of Chicago Graduate Library School Conference on August 8. In addition to the series of seven books to be published by Columbia University Press, the following mimeographed reports to the director of the inquiry will be available in August for a price covering the cost of distribution from the agencies indicated: *Money for Libraries: A Report on Library Finance* by Charles M. Armstrong, *Work Measurement in Public Libraries* by Watson O'D. Pierce, *Music Materials and the Public Library: An Analysis of the Role of the Public Library in the Field of Music* by Otto Luening, from the New York office of the Social Science Research Council; *The Public Library and the People: A National Survey for the Public Library Inquiry*, from the Survey Research Center, University of Michigan; and *Effects of Mass Media* by Joseph T. Klapper, from the Bureau of Applied Social Research, Columbia University, 15 Amsterdam Avenue, New York 23, N. Y.

Plans for the conference in Chicago during the week of August 8-13 give evidence of providing an excellent opportunity for review, criticism, and discussion of the inquiry's findings. Each major report will be discussed by a panel made up of a social scientist, a librarian, and a member of the inquiry staff. The subjects will be as follows: library government and finance, library use, library processes, and library personnel. Also, the relation of the public library to commercial book publishing and government publications, and to the newer library materials (films and records) will be discussed. The final meeting of the conference will be devoted entirely to consideration of the general report of the director of the inquiry. L. A. M.

## SLAVIC STUDIES

*(Joint with the American Council of Learned Societies)*

Philip E. Mosely (chairman), Ernest J. Simmons (secretary), Percy E. Corbett, Merle Fainsod, Robert J. Kerner, Geroid T. Robinson, S. Harrison Thomson, René Wellek.

One of the continuing needs of scholars and students working in the field of Slavic studies is for an adequate range of essential research tools and of basic reports of research available in English. During the past five years the American Council of Learned Societies has made an important contribution toward meeting this need through its Russian Translation Program. Twenty-four significant studies in the field of Russian history, culture, and social science have been translated. Several of them, including works by Kuzminskaya, Vyshinsky, and Gudzi, have been published; other volumes are scheduled for early publication. Another continuing need is for the reprinting in Slavic languages of manuals, bibliographies, and studies which are important as tools for scholars in this field and which are, in some cases, unobtainable today. A series of useful vol-

umes in this category have also been reproduced by photo-offset under the ACLS Program.

At its meeting on February 19-20, the committee discussed the usefulness and possible continuation of these programs. In accordance with the committee's recommendation to the two Councils, this problem has been referred for study and recommendation to a Subcommittee on Slavic Translation and Reproduction Program. This subcommittee has undertaken to review the continuing needs of research workers and students for the translation and reprinting of basic works in the Slavic field, to examine ways and means of defining procedures for selection of significant items, and to prepare recommendations for transmission, in the first instance, to the ACLS which has requested this survey. The subcommittee consists of the following members: René Wellek (chairman), Yale University; Frederick C. Barghoorn, Yale University; Cyril E. Black, Princeton University; Alexander Gerschenkron, Harvard University; Chapin W. Huntington, Washington, D. C.; Wacław Lednicki, University of California; Avrahm Yarmolinsky, New York Public Library.

P. E. M.

## PERSONNEL

### RESEARCH TRAINING FELLOWSHIPS

The Committee on Social Science Personnel—Fred Eggan (chairman), Donald T. Campbell, Edward P. Hutchinson, Philip E. Mosely, Frank A. Southard, Jr., Paul Webbink—met in May and voted to award research training fellowships to the following persons:

Richard N. Adams, Ph.D. candidate in anthropology, Yale University, for study in Peru of cultural change in the central highlands of Peru.

George B. Baldwin, Ph.D. candidate in industrial economics, Massachusetts Institute of Technology, for study in Great Britain of industrial relations in the nationalized coal industry.

John C. Cairns, Ph.D. candidate in history, Cornell University, for study of research methods in sociology.

Edward P. Dozier, Ph.D. candidate in anthropology, University of California at Los Angeles, for study of social and cultural change in Hano, Arizona.

R. Gordon Gilbert, Ph.D. candidate in political science, University of California, for study of the influence of science and beliefs about science on the political writings of Hooker and Hobbes.

Leo A. Goodman, Ph.D. candidate in mathematical statistics, Princeton University, for research on the general theory of statistics and its sociological applications.

Michael Gort, Ph.D. candidate in economics, Columbia University, for research on determinants and characteristics of investment decisions, with special reference to public utilities.

Theodore S. Hamerow, Ph.D. candidate in history, Yale University, for research in Germany on eco-

nomic and social aspects of the German Revolution of 1848.

Albert Kessler, Ph.D. candidate in economics, University of Wisconsin, for research in Israel on the economic budget and planned development.

William W. Marvel, Ph.D. candidate in politics, Princeton University, for research on the ideological content of postwar American policy toward Europe.

Mark Perlman, Ph.D. candidate in economics, Columbia University, for research in the United States and Australia on industrial arbitration.

Frank A. Pinner, Ph.D. candidate in political science, University of California, for theoretical and empirical investigation of political value systems.

Melvin C. Richter, Ph.D. candidate in political science, Harvard University, for study in Great Britain of the Oxford Idealists.

Sidney E. Rolfe, Ph.D. candidate in economics, University of Chicago, for research in Great Britain on allocation of manpower under planning.

David R. Saunders, Ph.D. candidate in psychology, University of Illinois, for research on leadership in small groups.

Richard D. Schwartz, Ph.D. candidate in sociology, Yale University, for research in Israel on social and psychological concomitants of communism.

Herbert A. Shepard, Ph.D. candidate in industrial economics, Massachusetts Institute of Technology, for research on communication and cooperation in a physical research laboratory.

Murray Wax, Instructor in Social Science, University of Chicago, for a critical examination of the methodology of Freud.

Ernst A. Wiener, Ph.D. candidate in sociology, Columbia University, for research in Germany on the Social Democratic Party in a West German city.

## AREA RESEARCH TRAINING FELLOWSHIPS AND TRAVEL GRANTS

At a meeting on April 23 the Committee on Area Research Training Fellowships—Philip E. Mosely (chairman), Cora Du Bois, Merle Fainsod, Robert B. Hall, Thorsten Sellin, Charles Wagley, and Walter L. Wright, Jr.—voted to award fellowships to the following persons:

- Roger S. Abbott, Ph.D. in political science, University of California, for study in Chile of the contemporary structure and functioning of the national government.
- Thad P. Alton, Ph.D. candidate in economics, Columbia University, for research in Poland on Polish postwar economic plans.
- Richard K. Beardsley, Ph.D. University of California, for ethnographic research in Japan.
- Morris Bornstein, Ph.D. candidate in economics, University of Michigan, for research in the United States and Brazil on the task of central banking in the economic development of Brazil.
- Ellsworth C. Carlson, Ph.D. candidate in history, Harvard University, for study and research in the United States in modern Chinese economic history.
- David Granick, Ph.D. candidate in economics, Columbia University, for research in the United States on Soviet plant management and planning.
- Leopold H. Haimson, Ph.D. candidate in history and social relations, Harvard University, for research in the United States on the evolution of the Bolshevik party and personality ideal.
- Marius B. Jansen, Ph.D. candidate in history, Harvard University, for study in the United States of Japanese relations with Chinese revolutionaries, 1895-1915.
- Ralph K. Lewis, Ph.D. candidate in anthropology, Columbia University, for training in colloquial Syrian Arabic.
- Robert A. Lystad, Ph.D. candidate in anthropology, Northwestern University, for research in Africa on differential acculturation of the Ashanti and Agni.
- Alexander G. Park, Ph.D. candidate in government, Columbia University, for study in the United States on Soviet revolutionary theory and practice, 1917-26, and their application in Central Asia.
- Dankwart A. Rustow, Ph.D. candidate in government, Yale University, for study in Sweden of the Swedish party system.

Travel grants were awarded to the following:

- Fred R. Eggan, Professor of Anthropology, University of Chicago, for research in the Philippines and South-eastern Asia.
- Halford L. Hoskins, Specialist in International Relations, Legislative Reference Service, for research in London and the Near and Middle East on power politics in the Middle East.
- David G. Mandelbaum, Professor of Anthropology, University of California, Guggenheim Fellow, 1949-50, for study of the Kota people of South India.
- Clement G. Motten, Assistant Professor of History, Temple University, for research in Chile, Bolivia, and Peru on intellectual and political history.
- Adolf Sturmthal, Professor of Economics, Bard College, for research in London and numerous continental cities on European labor movements since the end of World War II.

## ECONOMIC HISTORY FELLOWSHIPS

The Committee on Economic History has made the following awards under its special program of national fellowships in economic history:

- Whitney K. Bates, Ph.D. candidate in history, University of Wisconsin, for study of federal assumption of state debts, 1783-93.
- Ping-ti Ho, Ph.D. candidate in history, Columbia University, for study of the state and the landed interest in Great Britain, 1870-1914.
- Douglass C. North, Ph.D. candidate in economics, University of California, for a history of the policies and internal organization of the Metropolitan Life Insurance Company.
- Arthur J. R. Smith, Ph.D. candidate in economics, Harvard University, for study of the economic development of Canada as related to business cycle fluctuations, 1873-1913.
- Lloyd Ulman, Ph.D. candidate in economics, Harvard University, for research on the development of the national labor union.

## GRANTS-IN-AID

At its annual meeting on March 28-29 the Committee on Grants-in-Aid—Blair Stewart (chairman), Paul W. Gates, Lyle H. Lanier, John W. Riley, Jr., Joseph J. Spengler—made the following 34 grants for completion of research projects currently under way:

- Paul A. Baran, Economist, Federal Reserve Bank of New York (Associate Professor of Economics, Stanford University, September 1949), for study in Eastern Europe of economic planning and industrialization.
- Viola F. Barnes, Professor of History, Mount Holyoke College, for study in England of British colonial policy, 1760-78.
- Adolf Berger, Professor of Roman Law, Ecole Libre des Hautes Etudes, for completion of an encyclopedical dictionary of Roman Law.
- William C. Binkley, Professor of History, Vanderbilt University, for a study of the Texas Revolution of 1835-36.
- B. R. Brazeal, Professor of Economics and Dean, Morehouse College, for a socio-economic study of the life and work of A. Philip Randolph.
- Willson H. Coates, Professor of History, University of Rochester, for research in England on leaders in the Long Parliament of 1640.
- Robert S. Cotterill, Professor of History, Florida State University, for historical study of southern Indians, 1775-1825.
- LaWanda Cox, Instructor, Hunter College, for historical study of American farm labor since the Civil War.
- Frederick H. Cramer, Associate Professor of History, Mount Holyoke College, for study of the influence of scientific thought in the later Roman Empire.
- Guy H. Dodge, Associate Professor of Political Science, Brown University, for study of French liberalism since the Revolution.
- Henry W. Ehrmann, Associate Professor of Political Science, University of Colorado, for study of French management from depression to reconstruction.
- Arthur A. Ekirch, Jr., Assistant Professor of History, American University, for historical study of the tradition of anti-militarism in the United States.



Oliver P. Field, Professor of Government, Indiana University, for study of the changing concept of the executive as treated by late medieval and early modern writers.

Ossip K. Flechtheim, Assistant Professor of Government and History, Colby College, for study of the communist movement in Germany, 1914-48.

William J. Goode, Assistant Professor of Sociology, Wayne University, for study of post-divorce adjustment of urban mothers.

Cyrus H. Gordon, Professor of Assyriology and Egyptology, Dropsie College, for completion of a history of the Middle East to the time of Alexander the Great.

Oscar J. Hammen, Assistant Professor of History, Montana State University, for historical study of Europe, 1830-50.

Abram L. Harris, Associate Professor of Economics, University of Chicago, for study in England of British democratic socialism.

Rudolf Heberle, Professor of Sociology, Louisiana State University, for study of the sociology of social movements and political parties.

Louis C. Hunter, Special Staff, Industrial College of the Armed Forces, Adjunct Professor of American History, American University, for historical study of mechanical power in industry in the United States in the late 18th and 19th centuries.

Rose Hum Lee, Assistant Professor of Sociology, Roosevelt College, for study of Chinese war wives in the San Francisco region.

Henry J. McGuinn, Director of Social Science Division and Professor of Sociology, Virginia Union University, for study of the changing legal status of Negroes in the United States.

William B. Michael, Assistant Professor of Psychology, Princeton University, for factorial investigation of space, visualization, and reasoning.

Otto Nathan, Associate Professor of Economics, New York University, and Visiting Professor of Economics, Howard University, for study in Poland and Czechoslovakia of land reform, nationalization, and economic planning.

Gerhart Niemeyer, Professor of Political Science, Oglethorpe University, for study of the conditions of political freedom.

Marvin K. Opler, Chairman, Department of Anthropology and Sociology, Occidental College, for study in Hawaii of the resettlement patterns of Japanese segregated during the war.

Svend Riemer, Associate Professor of Sociology, University of Wisconsin, for research in neighborhood delineation (renewal).

Josiah C. Russell, Professor of History, University of New Mexico, for research in Europe on medieval European population.

David Spring, Lecturer in History, University of Toronto, for study in England of the English governing class, 1880-1914.

John H. Stewart, Associate Professor of History, Western Reserve University, for study in Ireland of Irish reactions to the French Revolution.

Theo Suranyi-Unger, Professor of Economics, Syracuse University, for completion of a study of relations between private enterprise and governmental economic planning (renewal).

Morris Swadesh, Associate Professor, College of the City of New York, for field study of Nootka ethnography.

S. Kirson Weinberg, Assistant Professor of Sociology, Roosevelt College, for study of social-psychological processes in schizophreniform disorders.

Bell I. Wiley, Professor of History, Louisiana State University, for study of the life of the common soldier in the Union Army during the Civil War (renewal).

## ANNOUNCEMENT

### FELLOWSHIPS AND GRANTS

The next closing dates for receipt of applications for Council fellowships and other grants will be as follows:

*Research Training Fellowships:* August 15, 1949, for awards to be made in October by the Committee on Social Science Personnel.

*Area Research Training Fellowships and Travel Grants for Area Research:* September 30, 1949, for awards to be made in November by the Committee on Area Research Training Fellowships.

*Grants-in-Aid of Research:* January 15, 1950, for awards to be made in April by the Committee on Grants-in-Aid.

Terms and conditions of the various awards will probably remain substantially as set forth in the announcements for 1949 which were distributed some months ago, with the following exceptions: The Committee on Social Science Personnel will probably not meet between October 1949 and March or April 1950. The Committee on Grants-in-Aid has recommended that the maximum permissible grant be \$1,500, instead of \$1,000 as previously announced. Applications will be accepted at any time, but no assurance can be given that those filed after the announced closing dates will receive advantageous consideration at the first subsequent committee meeting. The committees reserve the right to make awards between meetings in very exceptional cases. All communications relating to fellowships and grants should be addressed to the Washington office of the Council, 726 Jackson Place, N.W., Washington 6, D.C.

## SOCIAL SCIENCE RESEARCH COUNCIL

230 PARK AVENUE, NEW YORK 17, N. Y.

*Incorporated in the State of Illinois, December 27, 1924, for the purpose of advancing research in the social sciences*

*Directors 1949:* RALPH L. BEALS, WENDELL C. BENNETT, E. W. BURGESS, SHEPARD B. CLOUGH, LEONARD S. COTTRELL, JR., J. FREDERIC DEWHURST, FREDERICK S. DUNN, ELMER ELLIS, ROBERT B. HALL, PHILIP M. HAUSER, PENDLETON HERRING, CARL I. HOVLAND, WILLARD HURST, HAROLD A. INNIS, CLYDE KLUCKHOHN, LYLE H. LANIER, ALEXANDER LEIGHTON, ARTHUR W. MACMAHON, CHARLES E. MERRIAM, ROY F. NICHOLS, J. ROBERT OPPENHEIMER, FREDERICK OSBORN, ROBERT R. SEARS, JOSEPH J. SPENGLER, GEORGE W. STOCKING, WILLARD L. THORP, RALPH W. TYLER, S. S. WILKS, DONALD YOUNG, KIMBALL YOUNG

*Officers and Staff:* PENDLETON HERRING, *President*; PAUL WEBBINK, *Vice-President*; ELBRIDGE SIBLEY, *Executive Associate*; ELEANOR C. ISBELL, GERALD BREESE; JOHN G. TURNBULL; CALVIN W. STILLMAN; HAROLD E. JONES, *Pacific Coast Representative*; CAROLYN E. ALLEN, *Controller*